












NuTRoNS 1: Nucleonica Training on Nuclear Science

Joint EC/IAEA Nuclear Science Training Course with Nucleonica
12-15 October 2010










*To be held at the International Hydrographic Bureau
4b Quai Antoine 1er, 98000 Monaco*





12 October – Introduction

9:00	 Welcome to the Hydrographic International Bureau	M. Betti Director - IAEA-Environment Laboratories
9:20	 Nucleonica Overview	J. Magill, ITU
9:50	 Nuclear Data in Nucleonica	J. Magill, ITU
10:20	Participants Introduction	All
10:50 – Coffee		
Basic Nucleonica Applications		
11:15	 Hands on exercises with Nucleonica modules (MAC, D&S, Nuclear Data.)	 Exercises Z. Soti, ITU
12:30 – Lunch		
Chairperson A. Berlizov		
13:30	 Range and Stopping power	 Exercises M. Tufan, Ondokuz Mayis University, Samsun
14:30	 Using Nuclide Mixtures in Nucleonica	R. Dreher, ITU
15:00 – Coffee		
15:30	 Radioactive Decay Calculations with Nucleonica	J. Magill, ITU
16:00	 Hands on exercises: Decay Engine / Nuclide Mixtures	 Exercises Z. Soti, ITU
17:00 – End of Session		

13 October – Advanced Nucleonica Applications

Chairperson R. Arlt		
9:00	 Interaction of Radiation with Matter	M.Eriksson, IAEA-EL
10:00	 Introduction to the Gamma Spectrum Generator	 Exercises A. Berlizov, KINR
10:30 – Coffee		
11:00	 Introduction to the Gamma Spectrum Generator (continued)	
11:30	 Cambio File Translation	G.P. Lasche, Sandia labs.
12:30 – Lunch		
Chairperson G. P. Lasche		
13:30	 Radionuclide Identification Using Identify & WESPA	R. Arlt, (formerly IAEA)
14:30	 Library creation with Nucleonica	V. Kleinrath, Vienna UT
15:00 – Coffee		
15:30	 Basic hands on gamma calibration (efficiency and energy calibration) for low activity environmental levels	M. Eriksson, IAEA-EL
16:15	 Gamma spectrometric techniques for ultra low activity measurements – Underground facilities, Anti Compton and Cosmic radiation shield systems	J.-F. Comanducci, IAEA-EL
17:00 – End of Session		
19:00 – Social Event		

14 October – Participants Presentations

Chairperson M. Tufan		
9:00	 Nucleonica in the laboratory	 Exercises V. Kleinrath, Vienna UT
10:00	Participants give a short presentation on their work and experiences with Nucleonica	
10:00 -10:10	Daniela Pittauerová. Gamma spectroscopy for chronology of recent sediments (Czech Republic)	
10:10 -10:20	Teófilo Moltó Caracena. (Italy)	
10:20 -10:30	Ziyafer Gizem Portakal. Investigation of availability of composite filters on retention of radium in thermal waters (Turkey)	
10:30 – Coffee		
Chairperson V. Kleinrath		
11:00 -11:10	Branko Stepanovski. A short presentation on my work (Republic of Macedonia)	
11:10 -11:20	Lidija Nikolovska. Radiation protection services in Republic of Macedonia (Republic of Macedonia)	
11:20 -11:30	Dr. Hussein M. Al hazmi. Educational Programme in Nuclear Security at Naif Arab University for Security Sciences (NAUSS) (Kingdom of Saudi Arabia)	
11:30 -11:40	Abdeltarif Elanique. My research activities (Morocco)	
11:40 -11:50	Turgay Karali. Annual dose determination for archeological and geological dating (Turkey)	
11:50 -12:00	Marija Velevska. Individual monitoring for external radiation sources in Republic of Macedonia (Republic of Macedonia)	
11:50 -12:00	Tolkachev Alexej. Hand-held spectrometers based on NaI(Tl) scintillations crystals, features of calibrations and operations (Belarus)	
12:00 -12:10	Elcin Ekdal. Effects of phosphate fertilizing in soils of agricultural lands (Turkey)	
12:10 -12:20	Evelyn Pesur. Radiation safety in Estonia (Estonia)	
12:20 -12:30	Islam Abdellah. Studying the effect of radiation on some new fuoroscence Cyanine dyes (Egypt)	
12:30 – Lunch		
13:30-13:40	Ahmad Alomari. Gamma- ray spectrometry (Jordan)	
13:40-13:50	Carmen Cristache. Geochemical and mineralogical composition of sediments cored from the anoxic zone of the western Black Sea basin (Romania)	
13:50-14:00	Nikolay Rudun. Radiation control equipment of SEC "Nuclear Physics Researches" (Russia)	
14:00 – Coffee		
14:15-17:00	Visit of the IAEA-Environment Laboratories, Monaco	
17:00 – End of Session		
19:30 – Banquet		

15 October – Roundup

9:00	WebGraph	R. Dreher, ITU
9:30	Wiki, Blog, Forum, News	Z. Soti, ITU
10:15 – Coffee		
10:30	<i>In Silico</i> Dosimetry	F. Bourhaleb, I-SEE Computing
11:15	Networking with Nucleonica	V. Kleinrath, Vienna UT
12:00	Feedback, Questionnaire, Certificate	All
12:30 – Lunch		
13:00	Visit to the Oceanographic Museum in Monaco	
16:00 – End of Training Course		